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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,351	11/17/2006	Eric Stiig	05259P	2546
27804 HOLLAND &	7590 08/01/2007 BONZAGNI, P.C.	·	EXAMINER  VERDIER, CHRISTOPHER M	
171 DWIGHT	ROAD, SUITE 302			
LONGMEAD	OW, MA 01106-1700			PAPER NUMBER
		•	3745	<u> </u>
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			MAIL DATE	DELIVERY MODE
			08/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
	10/554,351	STIIG ET AL.				
Office Action Summary	Examiner	Art Unit				
•	Christopher Verdier	3745				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet	with the correspondence addre	ess			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may will apply and will expire SIX (6) Miles, cause the application to become	NICATION.  a reply be timely filed  ONTHS from the mailing date of this command the mailing date of the command the command the mailing date of the command the co				
Status	·					
1) Responsive to communication(s) filed on 10-2	4-05. 10-5-06. 11-1-06.	11-17-06.				
3) Since this application is in condition for allowa	nce except for formal ma	atters, prosecution as to the m	nerits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		·				
4) Claim(s) 1-10 is/are pending in the application	· .					
4a) Of the above claim(s) is/are withdra						
5) Claim(s) is/are allowed.	•					
6)⊠ Claim(s) <u>1-5 and 7-10</u> is/are rejected.			•			
7) Claim(s) 6 is/are objected to.		•				
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers		•				
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on 05 October 2006 is/are	: a)⊠ accepted or b)□	objected to by the Examiner.				
Applicant may not request that any objection to the	•					
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex	caminer. Note the attach	ed Office Action or form PTO-	-152.			
Priority under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:			,			
	1. Certified copies of the priority documents have been received.					
<ul><li>2.  Certified copies of the priority document</li><li>3.  Copies of the certified copies of the priority</li></ul>	•					
3.⊠ Copies of the certified copies of the prio application from the International Bureau		n received in this National St	age			
* See the attached detailed Office action for a list		nt received	,			
		· · · · · · · · · · · · · · · · · · ·				
•	·	•				
Attachment(s)			•			
1) Notice of References Cited (PTO-892)		Summary (PTO-413)				
2) Motice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)		o(s)/Mail Date  f Informal Patent Application				
Paper No(s)/Mail Date <u>11-1-06</u> .	6)	• •	•			

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Receipt and entry of Applicant's Preliminary Amendment dated October 24, 2005 is acknowledged.

## Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The abstract of the disclosure is objected to because in line 4, "outlet" should be changed to -- an outlet --. • Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: Appropriate correction is required.

On page 2, line 20, "b - b" should be changed to -- B - B --.

On page 2, line 21, "c -c" should be changed to -- C - C --.

On page 2, line 25, "d - d" should be changed to -- D - D --.

On page 2, line 29, "b - b" should be changed to -- B - B --.

On page 3, line 7, "axis" should be changed to -- axle --.

On page 4, line 29, "d - d" should be changed to -- D - D --.

On page 4, the last two lines are non-idiomatic.

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#### Claim Objections

Claims 1-10 are objected to because of the following informalities: Appropriate correction is required.

In claim 1, lines 5-6, "wind inlet" should be changed to -- wind side inlet --.

In claim 5, line 4, -- an -- should be inserted before "outlet".

In claim 8, line 2, "and has an elliptical cross section" should be deleted because this was previously recited.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 7, and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 2, "the tower" lacks antecedent basis. In claim 7, line 2, "preferably" is indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). In claim 9, lines 3-4, "the shaft of the turbine" lacks antecedent basis.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 8, as far as they are definite and understood, are rejected under 35

U.S.C. 102(b) as being anticipated by French Patent 1,086,320 (figures 1-2). Disclosed is a wind power plant of cyclone type comprising a base 11, a tower 1 arranged above the base and being open at the top and provided with a side inlet 5 for the wind to generate a cyclone in the tower, a substantially horizontal turbine 9 having inlets near 12 through the base and an outlet 8 to the center of the cyclone in the tower and being connected for driving a generator 10 arranged in the base, the tower being formed such that the cross-section of the tower forms an elliptical shape in the horizontal plane substantially along the entire tower length, the center of the ellipse being positioned substantially at the tower axis. The tower is vertical.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over French
Patent 1,086,320 in view of Japanese Patent 57-129,274. French Patent 1,086,320 discloses a
wind power plant substantially as claimed as set forth above, including an unnumbered shaft of
the turbine 9, but does not disclose a rotor with blades and a shaft parallel and coaxial to the
tower which is connected the shaft of the turbine by a freewheel coupling.

Japanese Patent 57-129,274 shows a wind power plant having a lower turbine 5 with a shaft 23, and an upper rotor 5 with blades and the shaft 23 parallel and coaxial to a tower 14, for the purpose of allowing for increased extraction of energy from the wind power plant.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the wind power plant of French Patent 1,086,320 such that it includes a rotor with blades and a shaft parallel and coaxial to the tower, as taught by Japanese Patent 57-129,274, for the purpose of allowing for increased extraction of energy from the wind power plant. Concerning the recitation of the rotor shaft being connected to the shaft of the turbine by a freewheel coupling, Official Notice is taken that freewheel couplings are conventionally used in multiple stage wind power plants, for the purpose of allowing decoupling of multiple rotor stages during excessive speeds or reverse rotation. Therefore, it would have

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been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified wind power plant of French Patent 1,086,320 such that the rotor shaft is connected the shaft of the turbine by a freewheel coupling, for the purpose of allowing decoupling of multiple rotor stages during excessive speeds or reverse rotation. Concerning claim 10, which recites that the rotor shaft is arranged for driving a water brake for heating up water, this is a recitation of intended use, and the modified wind power plant of French Patent 1,086,320 would inherently be capable of performing this function, since the rotor shaft is capable of driving a water brake for heating up water. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

#### **Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yeh, Wells, Carson, Hsu, Giorgini, and Payne are cited to show various wind turbines having towers and cyclonic action.

## Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 2-4 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C.V. July 23, 2007

Christopher Verdier Primary Examiner Art Unit 3745

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